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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,288	Applicant(s) LEE, JINSOCK	
	Examiner Munjal Patel	**Art Unit** 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _14 April 2006_.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-23_ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-23_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _14 April 2006_ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _04/14/2006 and 03/22/2007_.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. **Figure 1** should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 1, 16, and 22 are objected to because of the following informalities:

a) On line 2 of claim 1, "mobile station" with --method-- since it is a method being claimed and not a mobile station;

b) On claim 16 and 22, "TFCC" abbreviations are used in the claim language with no prior definition of it previously set forth in these claims or in the independent claims that they depend from. Applicant is allowed to use abbreviations in the specification; however, the claim language must be as clear as possible, especially when Applicant is being their own lexicographer. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1, 2, 8-14, 17-20, and 23** are rejected under 35 U.S.C. 102(e) as being anticipated by **Bensaou et al. (US Patent # US 6,747,976 B1)** herein after referred as **Bensaou**.

5. **Regarding claim 1, Bensaou** discloses a method of closed loop capacity scheduling between a base station **(Bensaou: Fig 2: 5, 7)** and a mobile station **(Bensaou: Fig 2:9)**, wherein the method comprises the steps of:

inputting respective flows to capacity controllers (FCC) in the mobile station **(Bensaou: Fig 2: 5, 7, & 9, Fig 6:59, 62 along with Col 8 lines [1-22] discloses mobile WT assigning individual queues to GCRA)**;

selecting a traffic class from a plurality of QoS traffic classes **(Bensaou: Fig 6 & Col 8 lines [13-22])**; and

allocating priority levels to the respective flows in consideration of the selected traffic class in order to transmit different QoS traffic classes **(Bensaou: Fig 6: 61, 63, 67 & Col 8 lines [13-37])**.

6. **Regarding claim 2, Bensaou** discloses the method of closed-loop capacity scheduling as claimed in claim 1, further comprising the step of computing, in the flows

to capacity controllers (FCCs), uplink capacity requests for the respective flows based on the selected traffic class **(Bensaou: Fig 6: 61, 63, 67 & Col 8 lines [13-37])**.

7. **Regarding claim 8, Bensaou** discloses a method of closed-loop capacity scheduling between a base station and a mobile station, wherein:

generating, in the mobile station **(Bensaou: Fig 6:58)**, a capacity request based on a priority allocated to each of the flows and a queue size of a flow queue allocated to each of the flows **(Bensaou: Fig 6 & Col 8 lines [1-22] discloses receiving bandwidth allocation at WT-subsystem and assigning allocated bandwidth based on the priority)**, determining, in the base station, a capacity allocation of the flow based on the capacity request **(Bensaou: Fig 5:40 & Col 7 lines [41-66])**, reporting, in the base station, a flow assigning information and the capacity allocation to the mobile station, and transmitting, in the mobile station, data packets based on the assigned flow and the capacity allocation **(Bensaou: Fig 5:40 & Col 7 lines [41-66] discloses AP determining bandwidth to allocate based on request from MS and allocating bandwidth and communicating it to MS)**.

8. **Regarding claim 9, Bensaou** discloses a method of closed-loop capacity scheduling as claimed in claim 8 comprising the step of generating, in the mobile station, the capacity request based on the priority assigned to each flow and the queue size of the flow queue allocated to each flow **(Bensaou: Fig 6:58 & Col 8 lines [31-34])**, wherein calculating, in the base station, a capacity allocation of each of the flows

based on a capacity request **(Bensaou: Col 8 lines [34-36])**, and determining, in the base station, when the total amount of the capacity allocation is equal to or greater than the usable capacity amount, the allowable capacity which is smaller than a capacity allocation based on the priority **(Bensaou: Col 8 lines [34-36] discloses APs reply in following frame the allocated number of time slots (bandwidth) and location approved, hence determining in the base station, decision of allocation happens only after the consideration of whether there is an available bandwidth, i.e. total bandwidth is greater than or equal to allocated bandwidth)**.

9. **Regarding claim 10, Bensaou** discloses a method of closed-loop capacity scheduling as claimed in claim 9, wherein the base station determines a capacity allocation to the flow based on the capacity request, the capacity allocation information including the flow ID of the flow and the allowable Capacity which can be used for the flow **(Bensaou: Col 8 lines [34-42] discloses bandwidth allocation based on reservation request referring to individual VC queues)**.

10. **Regarding claim 11, Bensaou** discloses a method of closed-loop capacity scheduling for use in a system capable of transmitting a plurality of data flows from the mobile station to the base station and having any one of the plurality of priority levels allocated to each of the data flows **(Bensaou: Col 8 lines [1-36] discloses WT-subsystem having CBR & UBR queues with different priorities scheduled to transmit to AP)**, wherein the method comprises:

(a) a first step where the mobile station reports to the base station of the provisional scheduling information generated based on the buffer storing amount of the data flow and the priority **(Bensaou: Col 8 lines [1-36] discloses WT-subsystem having CBR & UBR queues generates a request for bandwidth allocation to AP based on stored data in queue buffer according to the priority)**,

(b) a second step where the base station determines the capacity allocation to the data flow based on the provisional scheduling information priority **(Bensaou: Col 8 lines [34-36] discloses APs reply in following frame, the allocated number of time slots (bandwidth) and location approved, which is based on initial bandwidth request, hence determining bandwidth allocation at the base station depending on request)**,

(c) a third step where the base station reports to the mobile station of the data flow assigning information and the capacity allocation **(Bensaou: Col 8 lines [34-36] discloses APs reply in following frame, the allocated number of time slots (bandwidth) and location approved)**, and

(d) a fourth step where the mobile station transmits the data flow based on the capacity allocation **(Bensaou: Col 4 lines [12-14])**.

11. **Regarding claim 12, Bensaou** discloses a method of closed-loop capacity scheduling as claimed in claim 11, wherein the second step includes:

a fifth step for calculating a required capacity of each of the data flows based on the provisional scheduling information, and a sixth step for determining, in case where the

total amount of the required capacity is equal to or greater than the usable amount of capacity, the allowable capacity smaller than the required capacity **(Bensaou: Col 8 lines [34-36] discloses APs reply in following frame the allocated number of time slots (bandwidth) and location approved, hence calculating required bandwidth in the base station based on each request, & when the total amount of bandwidth requested is greater than or equal to available bandwidth, allocating from available bandwidth to WT, which is smaller in case of available bit rate (ABR))**.

12. **Regarding claim 13, Bensaou** discloses a method of closed-loop capacity scheduling as claimed in claim 11, wherein: the capacity allocation information in the third step includes a flow ID of the data flow and allowable capacity usable for the data flow **(Bensaou: Col 8 lines [34-42] discloses bandwidth allocation based on reservation request referring to individual VC queues).**

13. **Regarding claim 14, Bensaou** discloses a system for providing closed-loop capacity scheduling between a mobile station and a base station, capable of selecting a QoS traffic class from a plurality of QoS traffic classes, the system comprising:
a flow capacity controller (FCC) for computing a requested uplink capacity for each data flow specified by a selected QoS traffic class **(Bensaou: Fig 6: 61, 63, 67 & Col 8 lines [13-17])**; a capacity request controller (CRC) for changing the requested uplink capacity so as to generate a changed capacity request indicating a changed capacity **(Bensaou: Col 8 lines [1-42] discloses process of WT-subsystem changing**

bandwidth as allocated by APs); and means for transmitting the changed capacity request from the mobile station to the base station **(Bensaou: Col 4 lines [12-14])**.

14. **Regarding claim 17, Bensaou** discloses the system as claimed in claim 14, wherein the base station comprises:

reception means for receiving the changed capacity request **(Bensaou: Fig 3: Slave scheduler performs reservation request calculation, hence presence of capacity request controller)**; and a capacity scheduler for computing an allowable capacity for each of the flows with the use of the changed capacity request, the selected traffic class **(Bensaou: Fig 6: 61, 63, 67 & Col 8 lines [13-17])**, and the priority level transmitted from the mobile station **(Bensaou: Fig 3: Slave scheduler communicates the reservation request to Master scheduler)**.

15. **Regarding claim 18, Bensaou** discloses an uplink capacity managing method of managing uplink capacities for a plurality of uplink data flows in a base station, the base station comprising the steps of:

computing a schedulable uplink capacity indicating a difference between a maximum uplink capacity and a non-schedulable uplink capacity **(Bensaou: Fig 3: Master scheduler receives the request from slave scheduler and performs reservation allocation, hence calculation of available capacity, which is a difference between total capacity and non-available capacity)**; receiving a capacity request transmitted from the mobile station **(Bensaou: Fig 3: Master scheduler**

receives the request from slave scheduler); computing a minimum QoS capacity that satisfies a minimum QoS request **(Bensaou: Col 2 lines [26-29] discloses Minimum Cell Rate)**; and allocating a capacity to each of the flows in consideration of the priority level and the minimum QoS capacity allocated to the flow **(Bensaou: Fig 3: Master scheduler along with AP allocates bandwidth for each flow according to their priority)**.

16. **Regarding claim 19, Bensaou** discloses the uplink capacity managing method as claimed in claim 18, further comprising the steps of: computing an additional requested capacity to each of the flows so that the available and schedulable uplink capacity that remains after the allocation of the minimum QoS capacity is utilized to the maximum extent possible **(Bensaou: Col 4 lines [54-58] discloses Available Bit Rate)**; and allocating the remaining capacity to each of the flows having the additional requested capacities **(Bensaou: Col 4 lines [54-58] discloses Available Bit Rate queue)**.

17. **Regarding claim 20, Bensaou** discloses a mobile station device for which an uplink capacity control is carried out by the base station, comprising:

a flow capacity controller (FCC) for computing a requested uplink capacity for each of data flows specified by a selected QoS traffic class **(Bensaou: Fig 6 & Col 8 lines [1-22] discloses prioritizing bandwidth allocation for each class of service at WT-subsystem)**, a capacity request controller (CRC) for changing the requested uplink

capacity so as to generate a changed capacity request indicating a changed capacity **(Bensaou: Fig 3: WT generates the request for bandwidth allocation and once allocated it changes its queue transmission accordingly, hence presence of capacity request controller)**, and means for transmitting the changed capacity request from the mobile station to the base station **(Bensaou: Fig 3: WT generates the request for bandwidth allocation and once allocated it changes its queue transmission accordingly)**.

18. **Regarding claim 23, Bensaou** discloses a base station device for carrying Out an uplink capacity control for a plurality of mobile stations **(Bensaou: Fig 2: 5 & 7)**, comprising:

a receiving means for receiving the changed capacity request, a capacity scheduler for computing an allowable capacity for each of the flows with the use of the changed capacity request, selected traffic classes, and the priority level transmitted from the mobile Station **(Bensaou: Fig 2 & Col 4 lines [48-62] Master scheduler/AP scheduler has capability to receive bandwidth requests, calculate allowable bandwidth & allocate bandwidth according to the priority scheduler calculation)**.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

21. **Claims 3-6, 15, 17, and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bensaou** as applied to claims above, and further in view of **DeClerck et al.(US Patent # US 6,198937 B1)** herein after referred as **DeClerck.**

22. **Regarding claim 3, Bensaou** discloses the closed-loop capacity scheduling method as claimed in claim 2, further comprising the steps of:
changing, in a capacity request controller (CRC) **(Bensaou: Fig 3: Slave scheduler performs reservation request calculation, hence presence of capacity request controller)**, the capacity request for each of the flows with the use of the priority level, the selected traffic Class **(Bensaou: Fig 6: 61, 63, 67 & Col 8 lines [13-17])**, and the uplink transmission power; and transmitting the changed capacity request for each of the flows from the mobile station to the base station **(Bensaou: Fig 3: Slave scheduler communicates the reservation request to Master scheduler). However, Bensaou** fails to discloses the capacity request for each of the flows with the use of the priority level, the selected traffic Class, and <u>the uplink transmission power</u>, however, the examiner maintains that it was well known in the art to provide the capacity request for

each of the flows with the use of the priority level, the selected traffic Class, and the uplink transmission power as taught by **DeClerck (DeClerck: Col 8 lines [54-67] discloses controlling transmission power level of a radio link based on radio link capacity).**

23. **In a** similar field of endeavor, **DeClerck** discloses method and apparatus for controlling radio link capacity in communication system, In addition **DeClerck** discloses the capacity request for each of the flows with the use of the priority level, the selected traffic Class, and the uplink transmission power.

24. **Therefore,** it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **Bensaou** by specifically providing the capacity request for each of the flows with the use of the priority level, the selected traffic Class, and the uplink transmission power as taught by **DeClerck** for the purpose of providing compatibility between multiple transmission technologies **(DeClerck: Col 2 lines [40-45]).**

25. **Regarding claim 4, Bensaou** in view of **DeClerck** discloses the closed-loop capacity scheduling method as claimed in claim 3, further comprising the steps of: receiving, in the base station, the changed capacity request; computing, in a capacity scheduler (CS) of the base station **(Bensaou: Fig 3: Master scheduler receives the request from slave scheduler and performs reservation allocation, hence presence of capacity request controller)**, an allowable capacity for each of the flows with the use of the changed capacity request; and transmitting capacity allocation

indicating the allowable capacity for each of the flows from the base station to the mobile station **(Bensaou: Fig 3 & Col 4 lines [22-32] Master scheduler/AP slave scheduler communicates individual allocation bandwidth to slave scheduler in MS)**.

26. **Regarding claim 5, Bensaou** in view of **DeClerck** discloses the closed-loop capacity scheduling method as claimed in claim 3, further comprising the steps of: receiving, in the base station, the changed capacity request; computing, in a capacity scheduler (CS) of the base station **(Bensaou: Fig 3: Master scheduler receives the request from slave scheduler and performs reservation allocation, hence presence of capacity request controller)**, an allowable capacity for each of the flows with the use of the changed capacity request; computing a total value of the allowable capacities for the flows (the total allowable capacity) for each of the mobile stations; and transmitting capacity allocation indicating the total allowable capacity for each of the mobile station from the base station to the mobile station **(Bensaou: Fig 3 & Col 4 lines [21-22] Master scheduler communicates total allocation bandwidth to slave scheduler)**.

27. **Regarding claim 6, Bensaou** in view of **DeClerck** discloses the closed-loop capacity scheduling method as claimed in claim 4, further comprising the steps of: receiving, in a capacity allocation controller (CAC) of the mobile station, the capacity allocation; changing the capacity allocation received by the capacity allocation controller

(CAC) with the use of the selected traffic class and the uplink transmission power to generate a changed allocated capacity; and updating, in each of the flows to capacity controllers (FCCs), the allowable capacity with the use of the changed allocated capacity **(Bensaou: Fig 6 & Col 8 lines [1-22] discloses receiving bandwidth allocation at WT-subsystem and assigning allocated bandwidth based on the priority)**.

28. **Regarding claim 15, Bensaou** discloses the system as claimed in claim 14, wherein the mobile station further comprises:

a capacity allocation controller (CAC) changing the allocated capacity transmitted from the base station based on an uplink transmission power; and a flows to capacity controllers (FCC) for updating the allowed capacity with the use of the changed allocated capacity **(Bensaou: Col 8 lines [1-42] discloses process of WT-subsystem changing bandwidth as allocated by APs)**. **However, Bensaou** fails to discloses a capacity allocation controller (CAC) changing the allocated capacity transmitted from the base station based on an uplink transmission power, however, the examiner maintains that it was well known in the art to provide a capacity allocation controller (CAC) changing the allocated capacity transmitted from the base station based on an uplink transmission power as taught by **DeClerck (DeClerck: Col 8 lines [54-67] discloses controlling transmission power level of a radio link based on radio link capacity).**

29. **In a** similar field of endeavor, **DeClerck** discloses method and apparatus for controlling radio link capacity in communication system, In addition **DeClerck** discloses a capacity allocation controller (CAC) changing the allocated capacity transmitted from the base station based on an uplink transmission power.

30. **Therefore,** it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **Bensaou** by specifically providing a capacity allocation controller (CAC) changing the allocated capacity transmitted from the base station based on an uplink transmission power as taught by **DeClerck** for the purpose of providing compatibility between multiple transmission technologies **(DeClerck: Col 2 lines [40-45]).**

Regarding claim 17, Bensaou discloses the system as claimed in claim 15, wherein the base station comprises:

reception means for receiving the changed capacity request **(Bensaou: Fig 3: Slave scheduler performs reservation request calculation, hence presence of capacity request controller)**; and a capacity scheduler for computing an allowable capacity for each of the flows with the use of the changed capacity request, the selected traffic class **(Bensaou: Fig 6: 61, 63, 67 & Col 8 lines [13-17])**, and the priority level transmitted from the mobile station **(Bensaou: Fig 3: Slave scheduler communicates the reservation request to Master scheduler)**.

Regarding claim 21, Bensaou discloses a mobile station device as claimed in

claim 20 further comprising a capacity allocation controller (CAC) for changing the allocated capacity received from the base station based on an uplink transmission power; and an flows to capacity controllers (FCC) for updating the allowed capacity with the use of the changed allocated capacity **(Bensaou: Fig 6 & Col 8 lines [1-22] discloses prioritizing bandwidth allocation for each class of service at WT-subsystem)**. **However, Bensaou** fails to discloses a capacity allocation controller (CAC) for changing the allocated capacity received from the base station based on an uplink transmission power, however, the examiner maintains that it was well known in the art to provide a capacity allocation controller (CAC) for changing the allocated capacity received from the base station based on an uplink transmission power as taught by **DeClerck (DeClerck: Col 8 lines [54-67] discloses controlling transmission power level of a radio link based on radio link capacity).**

31. **In a** similar field of endeavor, **DeClerck** discloses method and apparatus for controlling radio link capacity in communication system, In addition **DeClerck** discloses a capacity allocation controller (CAC) for changing the allocated capacity received from the base station based on an uplink transmission power.

32. **Therefore,** it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **Bensaou** by specifically providing a capacity allocation controller (CAC) for changing the allocated capacity received from the base station based on an uplink transmission power as taught by **DeClerck** for the purpose of providing compatibility between multiple transmission technologies **(DeClerck: Col 2 lines [40-45]).**

33. **Claim 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bensaou** as applied to claims above, and further in view of **3GPP TR 25.896 V1.0.0 (2003-09)** herein after referred as **3GPP TR 25.896 V1.0.0**.

34. **Regarding claim 16, Bensaou** discloses the system as claimed in claim 14, wherein the mobile station further comprises:

a TFCC for selecting a combination of transport formats according to the capacity allocation transmitted from the base station; and an flows to capacity controllers (FCC) for computing a capacity request for each of the flows with the use of the selected combination of transport formats , **(Bensaou: Fig 6 & Col 8 lines [1-22] discloses prioritizing bandwidth allocation for each class of service at WT-subsystem)** . However, **Bensaou** fails to specifically indicate a transport format combination controller (TFCC) and a combination of transport formats according to the capacity allocations, however, the examiner maintains that it was well known in the art to provide a transport format combination controller(TFCC) and a combination of transport formats according to the capacity allocations as these are MAC function, which mobile (UE) performs when there is something to transmit **(3GPP TR 25.896 V1.0.0, section 6.3 lines [1-4]).**

35. **Therefore,** it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **Bensaou** by specifically providing a transport format combination controller (TFCC) and a combination of transport formats according to the capacity allocations as taught by **3GPP TR 25.896 V1.0.0** for the purpose of compliancy with 3GPP standard.

36. **Claims 7 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bensaou** in view of **DeClerck** as applied to claims above, and further in view of **3GPP TR 25.896 V1.0.0**.

37. **Regarding claim 7, Bensaou** in view of **DeClerck** discloses the closed-loop capacity scheduling method as claimed in claim 5, further comprising the steps of: receiving, in a transport format combination controller (TFCC) of the mobile station, the capacity allocations, **(Bensaou: Fig 6 & Col 8 lines [1-22] discloses receiving bandwidth allocation at WT-subsystem)**, selecting, in the transport format combination controller (TFCC), a combination of transport formats according to the capacity allocations; and computing, in each of the flows to capacity controllers (FCC), a capacity request for each flow according to the selected combination of transport formats, however, **Bensaou** in view of **DeClerck** fails to specifically indicate a transport format combination controller(TFCC) and a combination of transport formats according to the capacity allocations, however, the examiner maintains that it was well known in the art to provide a transport format combination controller(TFCC) and a combination of transport formats according to the capacity allocations as these are MAC function, which mobile (UE) performs when there is something to transmit **(3GPP TR 25.896 V1.0.0, section 6.3 lines [1-4]).**

38. **Therefore,** it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **Bensaou** in view of **DeClerck** by specifically providing a transport format combination controller (TFCC) and a combination of

transport formats according to the capacity allocations as taught by **3GPP TR 25.896 V1.0.0** for the purpose of compliancy with 3GPP standard.

39. **Regarding claim 22, Bensaou** in view of **DeClerck** discloses a mobile station device as claimed in claim 21, wherein the device further comprises a transport format combination controller (TFCC) for selecting a transport format combination based on the capacity allocation transmitted from the base station, and an flows to capacity controllers (FCC) for computing the capacity request for each of the flows by the use of the combination of the selected transport formats **(Bensaou: Fig 6 & Col 8 lines [1-22] discloses prioritizing bandwidth allocation for each class of service at WT-subsystem)**. however, **Bensaou** in view of **DeClerck** fails to specifically indicate a transport format combination controller(TFCC) and a combination of transport formats according to the capacity allocations, however, the examiner maintains that it was well known in the art to provide a transport format combination controller(TFCC) and a combination of transport formats according to the capacity allocations as these are MAC function, which mobile (UE) performs when there is something to transmit **(3GPP TR 25.896 V1.0.0, section 6.3 lines [1-4]).**

40. **Therefore,** it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **Bensaou** in view of **DeClerck** by specifically providing a transport format combination controller (TFCC) and a combination of transport formats according to the capacity allocations as taught by **3GPP TR 25.896 V1.0.0** for the purpose of compliancy with 3GPP standard.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Munjal Patel whose telephone number is (571)270-5541. The examiner can normally be reached on Monday - Friday 9:00 AM - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on 571-272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Munjal Patel
Examiner
Art Unit 2617

/M. P./
Examiner, Art Unit 2617

/Rafael Pérez-Gutiérrez/
Supervisory Patent Examiner, Art Unit 2617